

SJVAPCD Best Available Control Technology (BACT) Guideline 5.2.2*
 Last Update: June 14, 2022

Almond Processing - Sizing Operation (In-shell Almonds and Shelled Almond Meats)

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	≥ 99% Control (Fabric Filter Baghouse, Cartridge-Type Dust Collector, or Equivalent)		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

Proactive Best Available Control Technology (BACT) Determination

District BACT Guideline 5.2.2

Almond Processing - Sizing Operation

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I. Introduction

The objective of this project is to proactively update BACT Guideline 5.2.2, which applies to almond sizing operations for in-shell almonds and almond meats. This guideline was last updated on August 23, 2001.

The current update will incorporate any applicable and more stringent emission control standards that have been achieved in practice or determined to be technologically feasible since the last update. Any corrections and/or changes needed to ensure consistency with the District's BACT policy and other District practices will also be made.

The discussions in this update will be limited to the following topics:

- Source of emissions
- Current BACT requirements
- Top-down BACT analysis for all pollutants
- Recommendations

II. Source of Emissions

The only pollutant of concern emitted from almond sizing operations is particulate matter (PM). Emissions of other pollutants are considered insignificant. Almond processing operations generate dust from the movement of trash, hulls, shells, and meats. Factors that affect the quantity of PM emissions from almond processing operations include the type of operation, harvest method, trash content, climate, production rate, and the type and number of controls used by the operation.

Almond processing operations receive almonds from the fields or stockpiles. The almonds received are then processed in pre-cleaning operations that remove leaves, sticks, twigs, stones, dirt, sand, and other debris and are then sent to hulling operations that separate the almond hulls and fine trash from the almonds. In operations that only perform hulling, the hulled, in-shell almonds are separated from any remaining hull pieces in a series of air legs (counter-flow forced air gravity separators) and are then separated by size using a series of gravity tables or separators (classifier screen decks) and aspirators, graded, collected, and prepared for sale. In operations that perform hulling and shelling, the in-shell almonds continue through more shear rolls and screen separators to remove the almond shells. The hulled and shelled almond meats are then conveyed to a series of gravity tables or separators and aspirators to sort the almond meats by size. Optical sensors may also be used to grade the almond meats. Almonds that still contain hulls and shells, are returned to various points in the process. Finished almond meats are sent for storage or packaging. Fabric filter dust collectors are the typical used to control PM emissions from almond sizing operations

III. Current BACT Requirements

The current requirements of SJVAPCD BACT Guideline 5.2.2 are as summarized in the following table:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	99% control (Fabric filter baghouse, or equal)	-	-

IV. Top-Down BACT Analysis

BACT Analysis for PM₁₀ Emissions

As explained earlier, the only pollutant of concern emitted from almond sizing operations is particulate matter (PM₁₀)

Step 1 - Identify All Possible Control Technologies

The following BACT clearinghouse references were reviewed to identify any control technologies that could be considered more stringent than the current District BACT requirements for almond sizing operations:

- EPA RACT/BACT/LAER clearinghouse
- California Air Resources Board (CARB) BACT clearinghouse
- South Coast AQMD (SCAQMD) BACT clearinghouse
- Bay Area AQMD (BAAQMD) BACT clearinghouse
- Sacramento Metro AQMD (SMAQMD) BACT clearinghouse
- San Diego APCD (SDAPCD) BACT clearinghouse
- San Joaquin Valley APCD (SJVAPCD) BACT clearinghouse

In addition, the rules and regulations of the following agency were searched to identify if the agencies currently had any regulations that specifically applied to almond sizing or nut processing operations that contained any emission limits that could be considered more stringent than the current District BACT requirements for almond sizing operations:

- South Coast AQMD
- Bay Area AQMD
- Sacramento Metro AQMD
- San Diego APCD
- Colusa County APCD (CCAPCD)
- Yolo-Solano AQMD (YSAQMD)

No regulations that specifically apply to almond sizing or nut processing operations were located for these agencies.

Survey of BACT Guidelines:

The EPA RACT/BACT/LAER clearinghouse does not include general guidelines, only determinations made by individual agencies. No determinations for almond sizing operations were found in the EPA RACT/BACT/LAER clearinghouse.

No BACT determinations for almond sizing operations were found in the CARB BACT clearinghouse, SCAQMD BACT clearinghouse, BAAQMD BACT clearinghouse, SMAQMD BACT clearinghouse, or San Diego APCD BACT Clearinghouse.

However, the following BACT guidelines with potential applicability to almond sizing operations were identified:

South Coast AQMD BACT Guideline for Bulk Solid Material Handling – Feed and Grain Handling

- BACT Requirement: Baghouse (Achieved in Practice)

South Coast AQMD BACT Guideline for Bulk Solid Material Handling – Other, Other Dry Materials Handling (includes conveying, size reduction, and classification)

- BACT Requirement: Baghouse - Enclosed Conveyors and Baghouse (Achieved in Practice)

Bay Area AQMD BACT Guideline 155.1 – Solid Material Handling (Conveying, Size Reduction, Classification) – Dry

- BACT Requirement: Enclosure of size reduction and classification equipment, conveyors, and associated material transfer points and vent to baghouse (Achieved in Practice)

Sacramento Metro AQMD BACT Guideline 129 (expired) – Bulk Dry Material Storage & Handling (Conveying/Mixing/Blending/Milling/Bagging)

- BACT Requirement: All emission points enclosed and vented to a 99% efficient fabric filter baghouse (Achieved in Practice)

The BACT determinations identified above with potential applicability to almond sizing operations all require the use of fabric filter baghouses to control PM₁₀ emissions from dry material handling operations. Some of the BACT determinations identified above also include an additional requirement to enclose

conveyors and sizing and classification equipment. The requirement to use a fabric filter baghouse or equivalent to control PM₁₀ emissions is already included in current District BACT Guideline 5.2.2. The additional requirement to enclose conveyors and sizing and classification equipment included in some of the BACT guidelines appears to specifically apply to dry material handling operations that are primarily conducted outdoors, such as aggregate processing or production of concrete. Except for the initial unloading and receiving of almonds, almond processing operations are conducted inside buildings with emission points generally vented to control devices. Of the BACT guidelines above, the South Coast AQMD BACT guideline for feed and grain handling operations applies to an operation that is the most similar to almond processing operations and this South Coast AQMD BACT guideline does not include the additional requirement to enclose conveyors and sizing and classification equipment. Because almond processing operations are conducted inside of buildings, the additional requirement to enclose conveyors and sizing and classification equipment included in some of the BACT guidelines identified above is not necessary and will not be included in this update District BACT Guideline 5.2.2.

Survey of Applicable Rules and Regulations:

As noted above no rules or regulations that specifically apply to almond sizing or nut processing operations were located for the SCAQMD, BAAQMD, SMAQMD, SDAPCD, CCAPCD, or YSAQMD.

Review of District Permitted Equipment:

In order to evaluate what PM₁₀ control technologies are currently being utilized by almond sizing operations permitted in the SJVAPCD, the active permits for almond sizing operations in the SJVAPCD were reviewed. See Appendix C for a list of the almond sizing operations currently permitted in the SJVAPCD.

30 active SJVAPCD permits that included almond sizing operations were located (excluding one permit that listed a permit-exempt almond sizing operation). No permits for almond sizing operations were located that currently use PM₁₀ control technologies with greater control efficiency than the achieved in practice BACT requirement to use a fabric filter baghouse included in current SJVAPCD BACT Guideline 5.2.2. The majority of the almond sizing operations use fabric filter baghouses to control PM₁₀ emissions, with 27 of the 30 operations located using this control. One of the almond sizing operations located uses a custom sock filter with baghouse filter bags to control PM₁₀ emissions. One of the operations uses a cyclone to control PM₁₀ emissions and one of the operations did not use any controls for PM₁₀ emissions. As stated above, no permits for almond sizing operations were located that currently use PM₁₀ control technologies with greater control efficiency than a fabric filter baghouse. Therefore, use of a fabric filter baghouse, or equivalent, will remain achieved in practice BACT to control PM₁₀ emissions from almond sizing operations.

Additional Technologies Considered:

In addition, the EPA Clean Air Technology Center (CATC) Air Pollution Technology Fact Sheets and Technical Bulletins¹ were checked for PM₁₀ control technologies with potential applicability to almond sizing operations that could be considered more stringent than the current District BACT requirements for almond sizing operations.

The following technologies from the EPA CATC Air Pollution Technology Fact Sheets and Technical Bulletins were located that could potentially be applied to almond sizing operations and have PM₁₀ control equal to or greater than the current District BACT requirement of using a fabric filter baghouse to control PM₁₀ emissions from almond sizing operations.

Cartridge Dust Collector with Pulse-Jet Cleaning (also referred to as Extended Media)

- Actual PM₁₀ control efficiency listed for older existing cartridge collectors: 99-99.9%
- Design PM₁₀ control efficiency listed for new cartridge collectors: 99.99-99.999%

High Efficiency Particle Air (HEPA) Filter and Ultra Low Penetration Air (ULPA) Filter (also referred to as Extended Media)

- Minimum PM₁₀ control efficiency rating listed for HEPA filters: 99.97% for particulates with a diameter of 0.3 µm or larger
- Minimum PM₁₀ control efficiency rating listed for ULPA filters: 99.9995% for particulates with a diameter of 0.12 µm or larger

Fabric Filter - Mechanical Shaker-Cleaned Type with and without Sonic Horn Enhancement (also referred to as Baghouses)

- Actual PM₁₀ control efficiency listed for older existing fabric filters cleaned by mechanical shakers: 95-99.9%
- Design PM₁₀ control efficiency listed for new fabric filters cleaned by mechanical shakers: 99-99.9%

Fabric Filter - Pulse-Jet Cleaned Type (also referred to as Baghouses)

- Actual PM₁₀ control efficiency listed for older existing fabric filters with pulse-jet cleaning: 95-99.9%
- Design PM₁₀ control efficiency listed for new fabric filters with pulse-jet cleaning: 99-99.9%

¹ EPA Clean Air Technology Center (CATC) Air Pollution Technology Fact Sheets (FS) and Technical Bulletins (TB) are available on the EPA website at: <https://www.epa.gov/catc/clean-air-technology-center-products#factsheets>

Fabric Filter - Reverse-Air/Reverse-Jet Cleaned Type with and without Sonic Horn enhancement (also referred to as Baghouses)

- Actual PM₁₀ control efficiency listed for older existing fabric filters with reverse-air/reverse-jet cleaning: 95-99.9%
- Design PM₁₀ control efficiency listed for new fabric filters with reverse-air/reverse-jet cleaning: 99-99.9%

Fabric filters cleaned by mechanical shaking, fabric filters cleaned by pulse jets, and fabric filters cleaned by reverse air/reverse jets are already included in the current BACT requirements of District BACT Guideline 5.2.2 under the general category 99% control (Fabric filter baghouse, or equal). Cartridge-type dust collectors are an additional option that can be considered to control PM₁₀ emissions from almond sizing operations. HEPA and ULPA filters are other technologies that were listed in the EPA CATC Air Pollution Technology Fact Sheets that were considered for potential applicability for the control of PM₁₀ emissions from almond sizing operations. However, as discussed below, based on the information from the EPA CATC Air Pollution Technology Fact Sheet for HEPA and ULPA filters, HEPA and ULPA filters are not considered suitable or practical options to control PM₁₀ emissions from almond sizing operations.

The EPA CATC Air Pollution Technology Fact Sheet for HEPA and ULPA filters indicates that *“HEPA and ULPA filters are best applied in situations where high collection efficiency of submicron PM is required, where toxic and/or hazardous PM cannot be cleaned from the filter, or where the PM is difficult to clean from the filter. HEPA and ULPA filters are typically utilized for applications involving chemical, biological, and radioactive PM.”* The EPA CATC Air Pollution Technology Fact Sheet lists the following common industrial applications for HEPA and ULPA filters: hospital, low-level nuclear, and mixed waste incinerators, and nuclear air ventilation and safety systems, and the lists the following commercial applications and manufacturing processes that use HEPA and ULPA filters: clean rooms, laboratories, food processing, and the manufacture of pharmaceuticals and microelectronics. The EPA CATC Air Pollution Technology Fact Sheet for HEPA and ULPA filters also indicates that HEPA and ULPA filters are limited to low capacity air flow applications and that for applications that require higher airflow capacities filter banks, or modules must be ducted together in parallel to increase the air flow capacity. The EPA CATC Air Pollution Technology Fact Sheet states that *“HEPA and ULPA filters are best used in applications that have low concentrations of PM, or prohibit cleaning of the filter”* and states that *“Standard baghouse or cartridge filters are required to filter out PM greater than 2.5 μm in diameter.”* Almond sizing operations may utilize large air flow rates, and similar to other agricultural processing operations, the majority of PM emitted from almond sizing operations will typically have a much larger diameter than the submicron diameter PM for which HEPA and ULPA filters are best suited. In addition, almond sizing operations may potentially have high concentrations of particulate matter greater than 2.5 μm in diameter. Because of these factors, HEPA and ULPA filters are

not considered suitable or practical options to control PM₁₀ emissions from almond sizing operations and will not be considered further.

Step 2 - Eliminate Technologically Infeasible Options

As discussed above, HEPA and ULPA filters are not considered suitable or practical options to control PM₁₀ emissions from almond sizing operations and will be removed from further consideration.

Step 3 - Rank Remaining Control Technologies by Control effectiveness

For the pollutants for which updated controls were identified, the applicable control options are shown in the attached draft updated BACT guideline attached in Appendix A.

Step 4 - Cost Effectiveness Analysis

Since this is a proactive BACT determination that is not part of a specific permitting action, cost effectiveness analysis is not application.

Step 5 - Select BACT

Since this is a proactive BACT determination that is not part of a specific permitting action, selecting BACT is not applicable. Recommendations for updates and corrections/changes to the current BACT requirements are discussed in the following section and summarized in the draft updated BACT guideline attached in Appendix A.

V. Recommendations

Based on the preceding analyses, the current BACT guideline should be updated as follows:

Update the title Name of District BACT Guideline 5.2.2 to Clarify that It Applies to Sizing of Both In-Shell Almonds and Shelled Almond Meats

District BACT Clearinghouse Guideline 5.2.2 was last updated under District Project N-1001114. The BACT determination for this project was applied to both Authority to Construct (ATC) Permit N-4441-1-0 for an almond meat finishing and sorting operation and ATC N-4441-2-0 for an in-shell almond finishing and sorting operation. However, the current title of District BACT Guideline 5.2.2 does not make it completely clear if the guideline is meant to apply to sizing of in-shell almonds, shelled almond meats, or both. Therefore, as part of this proactive update to District BACT Clearinghouse Guideline 5.2.2, it is proposed to update the title of the BACT guideline to clarify that the BACT guideline applies to both in-shell and shelled almond meats.

List Cartridge-Type Dust Collectors as an Equivalent Option to the Currently Listed Fabric Filter Baghouse

Current District BACT Clearinghouse Guideline 5.2.2 requires 99% of control of PM₁₀ emissions as achieved in practice BACT for PM₁₀ emissions from almond sizing operations and specifically lists a fabric filter baghouse as an option to achieve the required PM₁₀ control efficiency. Cartridge-type dust collectors are a commonly used alternative to fabric filter baghouses that have equivalent or greater PM₁₀ control efficiencies. Therefore, it is proposed cartridge-type dust collectors be specifically listed as an equivalent alternative achieved in practice option in District BACT Clearinghouse Guideline 5.2.2.

Appendices

A: Draft Updated BACT Guideline 5.2.2

B: Current BACT Guideline 5.2.2

C: List of Almond Sizing Operations Currently Permitted in the SJVAPCD

Appendix A
Draft Updated BACT Guideline 5.2.2

SJVAPCD Best Available Control Technology (BACT) Guideline 5.2.2*

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Almond Processing - Sizing Operation (In-shell Almonds and Shelled Almond Meats)

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PM ₁₀	≥ 99% Control (Fabric Filter Baghouse, Cartridge-Type Dust Collector, or Equivalent)		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

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Appendix B
Current BACT Guideline 5.2.2

SJVAPCD Best Available Control Technology (BACT) Guideline 5.2.2*
Last Update: 8/23/2001

Almond Processing - Sizing Operation

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	99% control (Fabric filter baghouse, or equal)		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

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Appendix C
List of Almond Sizing Operations
Currently Permitted in the SJVAPCD

Facility Name	Facility Description	Permit Number	Equipment Description	PM ₁₀ Control for Almond Sizing
NICHOLS PISTACHIO	AGRICULTURAL PRODUCTS PROCESSING	C-862-21-0	ALMOND SORTING AND SIZING OPERATION INCLUDING HANDSORT TABLES, SIZING AND X-RAY SCANNING AND ASPIRATORS FOR DUST CONTROL SERVED BY A DCI MODEL 36FS8 DUST COLLECTOR	Fabric Filter Baghouse
THE HULLING COMPANY	AGRICULTURAL PRODUCTS PROCESSING	C-1323-8-2	ALMOND HULLING AND SHELLING OPERATION WITH THIRTEEN SIZING DECKS; ONE MEAT DECK; FOUR VIBRATING CONVEYORS; TWENTY ELEVATORS; THREE GRAVITY SEPARATORS; THREE ELECTRONIC SORTERS; AND TWO FLUIDIZERS ALL SERVED BY THREE HARRIS MODEL DW13 BAGHOUSES AND ONE SCHENK PROCESS MODEL 144MCF1652 BAGHOUSE	Fabric Filter Baghouses
SILVER CREEK ALMOND CO INC	AGRICULTURAL PRODUCTS PROCESSING	C-8173-2-0	ALMOND CLEANING/SORTING LINE CONSISTING OF TWO HOPPERS, ONE SATAKE SORTER, ONE SIZER DECK, AND ASSOCIATED ELEVATORS SERVED BY A DONALDSON MODEL CPC-8 DUST COLLECTOR	Fabric Filter Baghouse
SIERRA VALLEY ALMONDS	AGRICULTURAL PRODUCTS PROCESSING	C-8233-1-0	ALMOND SIZING AND SORTING OPERATION SERVED BY A MAC MODEL 120-MCF-153 BAGHOUSE	Fabric Filter Baghouse
SIERRA VALLEY ALMONDS	AGRICULTURAL PRODUCTS PROCESSING	C-8233-4-0	ALMOND SORTING, SIZING AND PACKAGING OPERATION SERVED BY A 22,000 CFM MAC MODEL 120-MCF-255 BAGHOUSE	Fabric Filter Baghouse
EL DORADO ALMONDS LLC	AGRICULTURAL PRODUCTS PROCESSING	C-8250-2-2	ALMOND SORTING AND SIZING OPERATION CONSISTING OF ONE BIN DUMPER, ONE SHAKER DECK, TWO ASPIRATOR VIBRATORS, ONE COLOR SORTER, ONE SORTEX SORTER, ONE SIZING DECK, ONE BULK FILLER AND ASSOCIATED CONVEYORS AND ELEVATORS ALL SERVED BY A DONALDSON MODEL 64FS8 BAGHOUSE	Fabric Filter Baghouse
THE ALMOND COMPANY	AGRICULTURAL PRODUCTS PROCESSING - ALMONDS	C-8416-1-1	ALMOND PROCESSING OPERATION CONSISTING OF ONE RMC SIZER, ONE LMC SIZER, ONE TORIT MODEL 484-RFW-12 BAGHOUSE, ONE MAC 144-MCF-756 BAGHOUSE AND 4 PACKLINES INCLUDING ASSOCIATED SCREENS, DECKS AND CONVEYORS	Fabric Filter Baghouses
DIAMOND WEST FARMS		C-8526-1-0	ALMOND SIZING OPERATION CONSISTING OF SELF-CONTAINED BIN DUMPER, VIBRATORY CONVEYORS, SPLITTER DECK, ELECTRONIC SORTER, ELEVATORS, BULK WEIGH HOPPER, SIZING DECK, SEVEN SIZING LINES; ALL SERVED BY A DONALDSON CO. MODEL 121-FSD-8 PULSE JET DUST COLLECTOR	Fabric Filter Baghouse

Facility Name	Facility Description	Permit Number	Equipment Description	PM ₁₀ Control for Almond Sizing
HOLLAND NUT COMPANY	AGRICULTURAL PRODUCTS PROCESSING	C-8593-3-0	INSHELL ALMOND SORTING AND SIZING OPERATION CONSISTING OF TWO HOPPERS, ONE COLOR SORTER, THREE ELEVATORS EACH WITH LIFT DISCHARGE ALL SERVED BY AN DONALDSON TORIT MODEL 121-FS-12 BAGHOUSE, ONE SHAKER TABLE, ONE AIRLOCK, TWO HAND SORTING TABLES, ONE SEWING MACHINE, AND ASSOCIATED CONVEYORS AND AUGERS. THE BAGHOUSE WILL BE SHARED BY PERMIT UNITS C-8593-3 AND C-8593-4.	Fabric Filter Baghouse
HOLLAND NUT COMPANY	AGRICULTURAL PRODUCTS PROCESSING	ATC C-8593-4-0 (Equipment Start-Up 11-20-2017)	ALMOND MEAT SORTING AND SIZING OPERATION CONSISTING OF ONE HOPPER, FOUR COLOR SORTERS, SIX ELEVATORS EACH WITH LIFT DISCHARGE ALL SERVED BY AN DONALDSON TORIT MODEL 121-FS-12 BAGHOUSE, ONE SCALPING DECK, THREE SIZER DECKS, AND ASSOCIATED CONVEYORS AND AUGERS. THE BAGHOUSE WILL BE SHARED BY PERMIT UNITS C-8593-3 AND C-8593-4.	Fabric Filter Baghouse
ROCHE BROS	AGRICULTURAL PRODUCTS PROCESSING	N-699-2-5	ALMOND HULLING AND SHELLING OPERATION CONSISTING OF ONE PREHULLER, TWO HULL BEATERS, ELEVEN SHEAR ROLLS, SIX SHAKER DECKS, ONE SCALPING DECK, SEVEN CRACKERS, TWO SIZERS, TWO SORTERS, TWO SHELL ASPIRATORS, TWO MEAT ASPIRATORS AND ONE LMC GRAVITY DECK ALL SERVED BY TWO AB FABRICATION ABR-324-12 BAGHOUSES, FOUR UNCONTROLLED AIRLEGS AND VARIOUS BELTS, CONVEYORS AND ELEVATORS	Fabric Filter Baghouses
PARREIRA ALMOND PROCESSING	AGRICULTURAL PRODUCTS PROCESSING	N-1337-11-1	ALMOND SORTING AND SIZING OPERATION CONSISTING OF ONE BIN DUMPER, THREE ELECTRONIC SORTERS, ONE SIZING DECK, ONE METAL DETECTOR AND MAGNET AND ASSOCIATED CONVEYORS AND ELEVATORS ALL SERVED BY A LMC WEST/DONALDSON MODEL 225 FTD 10 BAGHOUSE	Fabric Filter Baghouse
VALLEY VIEW RANCH	CROP PREPARATION SERVICES	N-1416-3-1	ALMOND MEATS GRAVITY TYPE SIZING OPERATION CONSISTING OF AN LMC GRAVITY TABLE & SIZER. THE GRAVITY TABLE IS SERVED BY A MID-STATE 66" 1D3D CYCLONE	Cyclone
MCMANIS, STEVE	AGRICULTURAL PRODUCTS PROCESSING	N-2019-2-1	ALMOND HULLING AND SHELLING OPERATION CONSISTING OF ELEVEN SHEAR ROLLS, FOUR CRACKERS, FIVE ASPIRATORS, TWO AIR LEGS, TWELVE SCREEN DECKS, TWO GRAVITY TABLES, ONE DESTONER, ONE SIZER, AND ASSOCIATED ELEVATORS, CONVEYORS, AND AUGERS ALL SERVED BY A LMC MODEL #684-LP-12 BAGHOUSE	Fabric Filter Baghouse

Facility Name	Facility Description	Permit Number	Equipment Description	PM ₁₀ Control for Almond Sizing
MONTE VISTA FARMING COMPANY	ALMOND PROCESSING	N-2055-8-3	ALMOND SORTING AND SIZING OPERATION (LINE #1) CONSISTING OF ONE BIN DUMPER, TWO SIZERS, ONE DESTONER, ONE GRAVITY TABLE AND ASSOCIATED ELEVATORS, CONVEYORS AND ASPIRATORS ALL SERVED BY A WILKEY SHEET METAL BAGHOUSE MODEL WSM 144TL144 (THIS BAGHOUSE IS SHARED WITH PERMIT UNIT N-2055-9); ADDITIONAL EQUIPMENT FOR THIS OPERATION INCLUDES A 4-LANE ULTRASCAN ELECTRONIC COLOR SORTER AND 4 LANE SATAKE EVOLUTION COLOR SORTER.	Fabric Filter Baghouse
MONTE VISTA FARMING COMPANY	ALMOND PROCESSING	N-2055-9-3	ALMOND SORTING AND SIZING OPERATION (LINE #2) CONSISTING OF ONE BIN DUMPER, ONE 8-LANE SATAKE EVOLUTION ELECTRONIC COLOR SORTER, ONE TWO-DECK SIZER AND ASSOCIATED ELEVATORS AND CONVEYORS SERVED BY A WILKEY SHEET METAL MODEL WSM 144TL144 BAGHOUSE (THIS BAGHOUSE IS SHARED WITH PERMIT UNIT N-2055-8).	Fabric Filter Baghouse
STEWART & JASPER	AGRICULTURAL PRODUCTS PROCESSING	N-2199-8-2	ALMOND MEATS SORTING AND SIZING OPERATION WITH EIGHT VIBRATORY FEEDERS, SIX SORTING TABLES, TWO ELEVATORS, AND ONE BIN DUMPER WITH ASSOCIATED ASPIRATING/CONVEYING EQUIPMENT, ALL SERVED BY A LMC MODEL #72-LP-10-T BAGHOUSE	Fabric Filter Baghouse
ROY JOHNSON FARMS, INC.	AGRICULTURAL PRODUCTS PROCESSING	N-2924-2-5	ALMOND HULLING OPERATION WITH TWO HULLING LINES SERVED BY AN LMC MODEL 780LP12T BAGHOUSE, ONE ALMOND SHELLING OPERATION SERVED BY A SAUNCO MODEL SJT 12-144 BAGHOUSE AND ONE ALMOND GRAVITY SIZING (FINISHING) OPERATION SERVED BY AN LMC MODEL 64-FTD-10 BAGHOUSE	Fabric Filter Baghouse
STEVE GIKAS DBA GICO MANAGEMENT	SALTED AND ROASTED NUTS AND SEEDS	N-3442-5-1	ALMOND AND CORN KERNEL PROCESSING LINE WITH AN LMC MODEL MARC 500 GRAVITY SEPARATOR SERVED BY A SAUNCO MODEL SJT 8-100-1320 BAGHOUSE, BIN DUMPER, ASSOCIATED ELEVATORS, AND A PERMIT EXEMPT SIZING DECK	Uncontrolled Sizing Operation is Permit Exempt because it is not aspirated and has negligible emissions
HILLTOP RANCH	ALMOND PROCESSING FACILITY	N-4751-1-1	ALMOND FINISHING, SIZING, AND STERILIZATION OPERATION WITH A DESTONER, GRAVITY TABLE, THREE (3) SIZERS, AND A SORTING TABLE ALL SERVED BY A LMC MODEL NO. 450-LP-12 BAGHOUSE	Fabric Filter Baghouse

Facility Name	Facility Description	Permit Number	Equipment Description	PM ₁₀ Control for Almond Sizing
CROWN NUT COMPANY, INC.	AGRICULTURAL PRODUCTS PROCESSING	N-8613-5-0	ALMOND MEAT SIZING OPERATION CONSISTING OF ONE BOX DUMPER AND ASSOCIATED CONVEYORS, ELEVATORS, AND AUGERS SERVED BY A DONALDSON TORIT MODEL #121-FSD-12 DUST COLLECTOR (C). THIS DUST COLLECTOR WILL BE SHARED BY PERMIT UNITS N-8613-3, N-8613-4, AND N-8613-5	Fabric Filter Baghouse
PRIMO NUT	AGRICULTURAL PRODUCTS PROCESSING	N-8794-1-0	41.3 HP ALMOND KERNEL SORTING AND SIZING OPERATION CONSISTING OF FOUR (4) BIN DUMPERS, SORTING TABLES, AND ASSOCIATED CONVEYORS, LIFTS, ASPIRATORS AND PERMIT EXEMPT PACKAGING EQUIPMENT ALL SERVED BY A 15 HP REES INDUSTRIAL CLEAN AIR MODEL 860-U, S/N N 2846 BAGHOUSE	Fabric Filter Baghouse
PRIMO NUT	AGRICULTURAL PRODUCTS PROCESSING	N-8794-2-0	47.5 HP IN-SHELL ALMOND SORTING AND SIZING OPERATION CONSISTING OF ONE (1) BIN DUMPER, ONE (1) SHAKER DECK, ONE (1) SORTING TABLE, AND ASSOCIATED CONVEYORS, LIFTS, ASPIRATORS AND PERMIT EXEMPT PACKAGING EQUIPMENT ALL SERVED BY A 40 HP DRACCO DUST COLLECTORS MODEL 56 1 320, S/N 67 31832 BAGHOUSE	Fabric Filter Baghouse
THE FISHER NUT COMPANY	AGRICULTURAL PRODUCTS PROCESSING - ALMONDS	N-8902-1-0	ALMOND MEAT SIZING OPERATION CONSISTING OF SIZING DECKS, GRAVITY TABLE, SCALPER, DESTONER, BIN DUMPERS, CONVEYORS, AND ELEVATORS ALL SERVED BY A CUSTOM MADE SOCK FILTER DUST CONTROL SYSTEM WITH DONALDSON TORIT POLYESTER BAGS	Sock Filter Using Baghouse Filter Bags
STAR NUT COMPANY	AGRICULTURAL PRODUCTS PROCESSING	N-9053-2-0	ALMOND MEATS SIZING OPERATION SERVED BY ONE BOX DUMPER, TEN SIZING SCREENS AND VARIOUS ELEVATORS AND CONVEYORS	No Control
CENTRAL VALLEY ALMOND ASSO INC	AGRICULTURAL PRODUCTS PROCESSING	S-541-13-0	ALMOND HULLING AND SHELLING OPERATION CONSISTING OF: SIX INHULL SHEAR ROLLERS (STAGE 1), SIX INHULL CRACKER SHEAR ROLLERS (STAGE 2-6), NINE INSHULL CRACKER SHEAR ROLLERS (STAGE 2-11) AND ASSOCIATED AUGERS, CONVEYORS, ELEVATORS, ASPIRATORS, SIZING DECKS, GRAVITY TABLES, MEAT SEPARATORS, AIRLEGS, FLUIDIZERS, AND DESTONER SERVED BY TWO 120,000 CFM DONALDSON MODEL 882LP12T BAGHOUSES (BAGHOUSE #1 AND BAGHOUSE #2)	Fabric Filter Baghouses

Facility Name	Facility Description	Permit Number	Equipment Description	PM ₁₀ Control for Almond Sizing
TREEHOUSE CALIFORNIA ALMONDS LLC	AGRICULTURAL PRODUCTS PROCESSING	S-634-4-5	ALMOND SHELLING AND CLEANING OPERATION CONSISTING OF FIFTEEN SHEAR ROLLS, THIRTEEN ASPIRATORS, TWO SANDSCREENS, TWO DESTONERS, THREE MEAT SCREENS, ONE SIZER, ONE LASER SIZER, THREE GRAVITY TABLES, SEVERAL DECKS AND ASSOCIATED AUGERS, ELEVATORS AND CONVEYORS, ALL SERVED BY THREE BAGHOUSES: LMC 312-LP-12T, LMC 450-LP-12T (ALSO SERVING S-634-7) AND A DONALDSON TORIT MODEL 528-LP-12 REVERSE FLOW BAGHOUSE (ALSO SERVING S-634-7)	Fabric Filter Baghouses
TREEHOUSE CALIFORNIA ALMONDS LLC	AGRICULTURAL PRODUCTS PROCESSING	S-634-7-3	ALMOND INSHELL AND SIZING OPERATION CONSISTING OF ONE PIT, ONE SURGE TANK, ONE ELECTRONIC EYE (SATAKE), TWO HAND SORTING TABLES, ONE DECK AND ASSOCIATED AUGERS, ELEVATORS AND CONVEYORS SERVED BY THE BAGHOUSE LISTED ON S-634-4	Fabric Filter Baghouse
TREEHOUSE CALIFORNIA ALMONDS LLC	AGRICULTURAL PRODUCTS PROCESSING	S-640-9-3	SHELLED ALMOND SIZING OPERATION WITH LMC MODEL 481 DESTONER AND LMC MODEL 68 GRAVITY TABLE ALL VENTING TO SAUNCO MINES 12-SFLT-144 FABRIC FILTER	Fabric Filter Baghouse
GOLDEN EMPIRE SHELLING	AGRICULTURAL PRODUCTS PROCESSING	S-7358-2-0	ALMOND HULLING AND SHELLING OPERATION CONSISTING OF EIGHT HARDSHELL CRACKERS AND EIGHT HULLING SHEAR ROLLERS, NINE HARDSHELL CRACKER AND NINE SHELLING SHEAR ROLLERS, AND ASSOCIATED AUGERS, CONVEYORS, ELEVATORS, GRAVITY SIZING DECKS SERVED BY TWO LMC MODEL 882-LP-12 BAGHOUSES (BAGHOUSE #1 & BAGHOUSE #2)	Fabric Filter Baghouses
JSS ALMONDS LLC	ALMOND PROCESSING FACILITY	S-8133-1-0	ALMOND MEAT AND INSHELL RECEIVING, CLEANING, SIZING, AND SORTING OPERATION CONSISTING OF FOUR KM SMITH BIN DUMPERS WITH F-212 FEEDERS, EIGHT ANEX Z-LIFT BUCKET ELEVATORS, ONE TRIPLE/S DYNAMICS TEXAS SHAKER SCREEN, SIX TRIPLE/S DYNAMICS TEXFLEX VIBRATING CONVEYORS, FOUR RAPAT TROUGHING ROLLER BELT CONVEYORS, SIX KMS SORT BELT CONVEYORS, SIX SYNTRON FEEDERS, ONE FORSEBERG VIBRATING CONVEYOR, ONE TRIPLE/S DYNAMICS SLIPSTICK CONVEYOR, ONE FORSBERG 4 STAGE ASPIRATOR, ONE KMS ASPIRATOR, TWO RMC SIZERS SERVED BY A DONALDSON MODEL 198LP12 REVERSE AIR BAGHOUSE WITH A 32,000 ACFM BLOWER (274 HP ELECTRICAL)	Fabric Filter Baghouse